

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [Estes](#) /

› [Estes 009991 Space Shuttle Model Rocket Instruction Manual](#)

Estes 009991

Estes Space Shuttle Model Rocket Instruction Manual

Brand: Estes | Model: 009991

INTRODUCTION

This manual provides essential information for the safe and effective use of your Estes Space Shuttle Model Rocket. The Estes Space Shuttle is a 1:200 scale replica of the iconic American space program workhorse, designed for thrilling launches and reusable flights. Please read all instructions carefully before attempting to launch the model rocket.

PRODUCT OVERVIEW

The Estes Space Shuttle model rocket offers a unique and engaging experience for enthusiasts. Key features include:

- **Ready to Launch Design:** No assembly is required for the model itself, making it beginner-friendly.
- **Iconic 1:200 Scale Replica:** Faithfully replicates the NASA Space Shuttle, standing at 10.9 inches tall.
- **Detachable Boosters and Gliding Orbiter:** Designed for realistic flight and recovery.
- **Reusable:** Engineered for multiple launches, landings, and repeats.
- **Display Stand Included:** Allows for proud exhibition when not in use.

SETUP AND REQUIRED COMPONENTS

Your Estes Space Shuttle model rocket comes ready for flight. However, additional components are required for launch. Ensure you have all necessary items before proceeding.

What's Included:

- Estes Space Shuttle Model Rocket (1:200 scale)
- Display Stand

What You Need (Sold Separately):

- Estes® Porta-Pad II® Launch Pad
- Estes® Electron Beam® Launch Controller
- Estes® C5-3 or C6-3 Engines (C5-3 recommended)
- Estes® Recovery Wadding
- Four 1.5V AA Alkaline Batteries (for Launch Controller)



Figure 1: Estes Space Shuttle Model Rocket in its retail packaging. The packaging highlights the 1:200 scale and includes the display stand.

OPERATING INSTRUCTIONS

Follow these steps for a successful and safe launch of your Estes Space Shuttle model rocket.

Flight Sequence Overview:

1. **Lift Off:** The rocket ignites and begins its ascent.
2. **Acceleration:** The rocket rapidly gains speed and altitude.
3. **Climb Phase:** The rocket continues its upward trajectory.
4. **Peak Altitude:** The rocket reaches its maximum height (up to 600 feet).
5. **Recovery System Deploys:** The detachable boosters recover with a parachute, and the Orbiter glides back.
6. **Landing:** The components return safely to the ground for reuse.

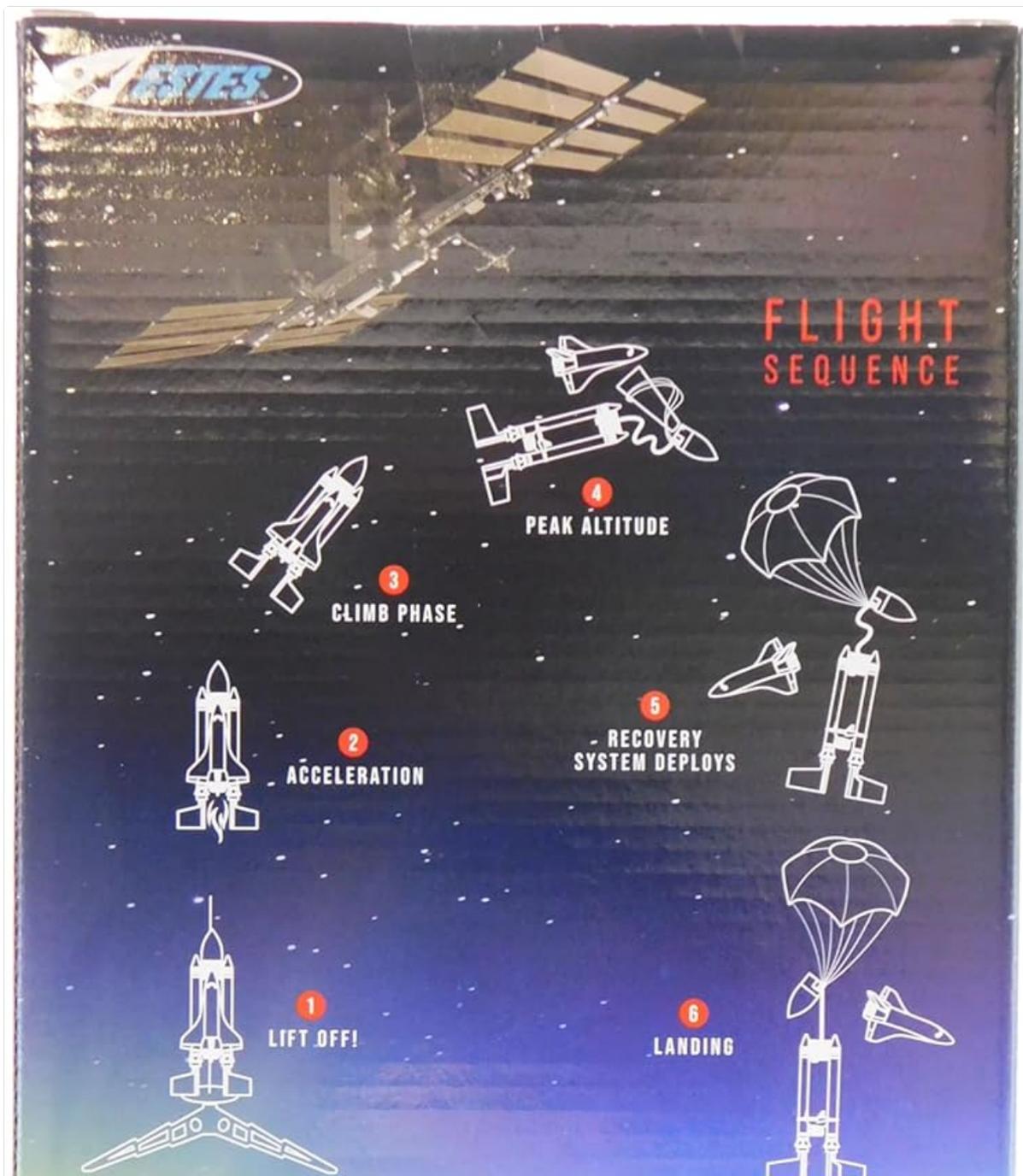




Figure 2: Detailed flight sequence of the Estes Space Shuttle, illustrating each phase from launch to recovery.

Launch Procedure:

- Ensure you are in a large, open area free from obstacles, dry grass, or flammable materials.
- Assemble the launch pad according to its instructions.
- Insert the recommended Estes C5-3 or C6-3 engine into the rocket's motor mount.
- Carefully insert recovery wadding above the engine to protect the recovery system.
- Place the rocket onto the launch rod of the launch pad.
- Connect the igniter to the engine and the launch controller.
- Ensure all spectators are at a safe distance (minimum 15 feet).
- Initiate launch using the Electron Beam Launch Controller.

Recovery and Reuse:

After reaching peak altitude, the recovery system will deploy. The boosters will descend via parachute, and the orbiter will glide back to the ground. Collect all components for inspection and prepare for subsequent launches.

Official Launch Video:

Your browser does not support the video tag.

Video 1: Official Estes Rockets Space Shuttle Model Rocket Launch Video. This video demonstrates the launch and recovery process of the model rocket.

MAINTENANCE

The Estes Space Shuttle model rocket requires minimal maintenance. After each flight:

- Inspect all components (orbiter, boosters, parachute) for any damage, cracks, or wear.
- Ensure the recovery wadding area is clean and free of debris.
- Store the rocket in a cool, dry place away from direct sunlight and extreme temperatures.

TROUBLESHOOTING

If you encounter issues with your model rocket, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Rocket fails to launch	Faulty igniter, loose connections, dead batteries in controller.	Check igniter connection, ensure wires are secure, replace controller batteries.
Poor recovery/damage upon landing	Insufficient recovery wadding, strong winds, improper deployment.	Use adequate recovery wadding, avoid launching in windy conditions, ensure recovery system is packed correctly.
Rocket veers off course	Bent launch rod, strong crosswinds, damaged fins.	Ensure launch rod is straight, wait for calm weather, inspect and repair fins if damaged.

SPECIFICATIONS

Attribute	Detail
Brand	Estes
Model Name	Space Shuttle
Model Number	009991
Scale	1:200
Dimensions (L x W x H)	10.9 x 1.64 x 1.64 inches
Item Weight	15.2 ounces
Material	Plastic
Color	White
Age Range (Recommended)	10+ (with adult supervision for those under 12)
Batteries Required	No (for rocket), Yes for controller (4x AA, sold separately)
Included Components	Display Stand

IMPORTANT SAFETY INFORMATION

WARNING: This product is recommended for children ages 10 and above. Adult supervision is required for users under 12 years of age. Always follow all safety guidelines provided with your launch system and rocket engines.

Model rocketry involves inherent risks. Always launch in open areas, away from people, buildings, and power lines. Never attempt to recover a rocket from dangerous locations such as power lines or rooftops. Do not modify the rocket or its components in any way not specified by the manufacturer.

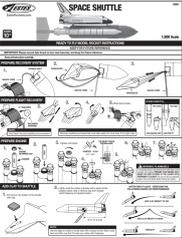
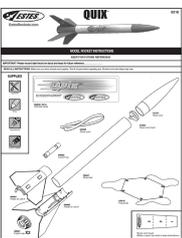
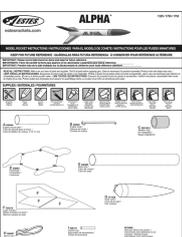
WARRANTY AND SUPPORT

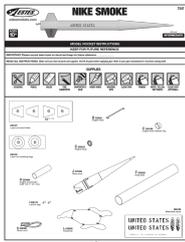
For warranty information, product support, or to purchase additional components, please visit the official Estes website or contact their customer service. You can find more information at the [Estes Store on Amazon](#).

Please retain this instruction manual for future reference.

© 2024 Estes. All rights reserved.

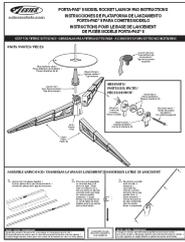
Related Documents - 009991

	<p>Estes Space Shuttle Model Rocket Instructions</p> <p>Step-by-step instructions for assembling and launching the Estes Space Shuttle model rocket, including preparation, countdown, launch, and recovery.</p>
	<p>Estes Quix Model Rocket Instructions</p> <p>Step-by-step assembly and launch instructions for the Estes Quix model rocket. Includes parts list, assembly diagrams, and safety precautions.</p>
	<p>Estes Alpha Model Rocket Instructions - Assembly and Launch Guide</p> <p>Comprehensive assembly and launch instructions for the Estes Alpha model rocket (Models 1225, 1756, 1753). Includes parts list, step-by-step building guide, finishing tips, recovery system preparation, engine setup, launch procedure, and safety precautions.</p>
	<p>Estes Vapor Model Rocket Kit Assembly and Launch Instructions</p> <p>Comprehensive instructions for assembling, finishing, and launching the Estes Vapor model rocket kit (Model 7294), including parts list, step-by-step assembly, painting guides, and safety precautions.</p>



[Estes Nike Smoke Model Rocket Instructions \(7247\)](#)

Detailed assembly and launch instructions for the Estes Nike Smoke model rocket (model number 7247). Includes parts list, supplies needed, step-by-step building guide, finishing tips, and safety precautions.



[Estes Porta-Pad II Model Rocket Launch Pad and Electron Beam Controller Instructions](#)

Comprehensive instructions for assembling and using the Estes Porta-Pad II Model Rocket Launch Pad and the Electron Beam Launch Controller, including safety guidelines and troubleshooting.